

REMARKS

Applicant has amended this application in response to the office action. First, in response to the 35 USC § 112 rejection, applicant has actually provided two examples of other system conditions that can be utilized to determine if the expansion valve were opened for a reason other than low charge. The specific examples are included, for example, in paragraph 19, and in the claims. A worker of ordinary skill in the art would recognize how these system variables are utilized to determine if the expansion valve should be more open.

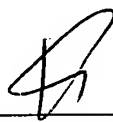
Also, changes to the drawings have been made to Figure 1 in response to the examiner's request.

The claims have been amended to insert limitations similar to those found in claim 5 into claim 1, and from claim 14 into claim 7. The prior art cannot meet these limitations. Only Ohkoshi was relied upon to reject these claims. While Ohkoshi does disclose monitoring an expansion valve to determine new refrigerant charge, it does not perform a reality check as set forth in the revised claims. Nothing in Ohkoshi would look at either the indoor and outdoor temperature, or the system low side and high side pressure. Simply, these limitations are not found in the prior art, and allowance of the amended claims is in order.

Further, new claims 21-24 recite the feature that in response to a determination that no other system characteristic is responsible for the fully open expansion valve, a compressor is at least partially (or fully dependent upon the claim) shut down. If a controller is to shut down a system, having this double check on the need to shut down the system is important. Neither of the prior art references perform both of these steps. The present invention thus provides benefits over the prior art.

Fees for one additional independent claim may be charged to Deposit Account No. 03-0835 in the name of Carrier Corporation. Applicant believes that no additional fees are necessary, however, the Commissioner is authorized to charge Deposit Account No. 03-0835 in the name of Carrier Corporation for any additional fees or credit the account for any overpayment.

Respectfully submitted,

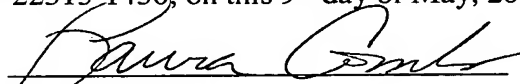


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Dated: May 9, 2005

CERTIFICATE OF MAIL

I hereby certify that the enclosed Response is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 9th day of May, 2005.



Laura Combs